POSTGRADUATE INSTITUTE OF MEDICINE UNIVERSITY OF COLOMBO

MD (DERMATOLOGY) EXAMINATION – JANUARY 2017

Date :- 30th January 2017

Time :- 1.00 p.m. - 3.00 p.m.

WRITTEN EXAMINATION

PAPER I – LONG QUESTIONS

Answer all questions.

Answer each question in a separate book.

1. Describe the aims and benefits of the World Health Organization multidrug therapy (WHO-MDT) of leprosy, shortcoming of this regimen and possible measures to overcome these. (100 marks)

2.

2.1. Outline the mechanisms of intra epidermal blister formation, giving examples. (18 marks)

2.2.

- 2.2.1. Draw and label the ultrastructure of the cutaneous basement membrane zone. (20 marks)
- 2.2.2. Indicate the relevance of these components in causing blistering diseases. (30 marks)
- 2.3. Briefly describe the direct immunofluorescence findings of sub epidermal autoimmune blistering diseases. (32 marks)

3.

3.1. Discuss steps that can be utilized to improve the diagnostic outcome when performing a skin biopsy. (30 marks)

3.2.

- 3.2.1. List three (03) special stains employed in dermatopathology and elaborate their significance in diagnosis. (15 marks)
- 3.2.2. List three (03) immunohistochemical markers giving examples of their usage in dermatopathology. (15 marks)

3.3.

3.3.1. What is interface dermatitis?

(10 marks)

3.3.2. List three (03) causes and discuss histological features that help to establish the diagnosis. (30 marks)

4.

4.1.

- 4.1.1. Briefly describe the functions of a chromophore. (15 marks)
- 4.1.2. List four (04) chromophores found in the human skin. (10 marks)

4.2.

4.2.1. List the normal (non pathological) effects of sun exposure.

(10 marks)

4.2.2. Describe three (03) of them.

(30 marks)

4.3.

- 4.3.1. Briefly describe ultraviolet light induced DNA damage and how it is repaired. (30 marks)
- 4.3.2. List two (02) clinical conditions where DNA repair is defective. (05 marks)

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MD (DERMATOLOGY) EXAMINATION - JANUARY 2017

Date: - 30th January 2017

Time :- 3.15 p.m. - 4.00 p.m.

WRITTEN EXAMINATION

PAPER II - STRUCTURED TYPE

Answer all questions.

Answer each question in a separate book.

1. A 50 year old female with obesity and rheumatoid arthritis on long term treatment was on a crash diet programme for last three months. Recently she was treated for deep vein thrombosis. She came to the dermatology clinic with diffuse hair loss. She does not go for any hair care procedures.

Investigations

ESR 65 mm
Hb 10 g/dL
Blood urea 23 mg/dL
Liver function tests normal

1.1. Mention five (05) causes for her hair loss.

(30 marks)

- 1.2. What clinical features would you consider in arriving at the diagnosis? (60 marks)
- 1.3. List two (02) further laboratory investigations helpful in the diagnosis. (10 marks)

2. A 55 year old previously well male in Medical ICU is referred to you with fever for seven days and large areas of dusky red patches and skin necrosis over the trunk and upper limbs and gangrene over the tips of the right index and left middle fingers.

Investigations:

| WBC | $20 \times 10^9 / L$ | | (4-11) |
|----------------------|----------------------|------|-------------|
| | Neutrophils | -90% | , , |
| Hb | 8.2 g/dl | | (13-18) |
| Platelet count | $80x\ 10^{9}/L$ | | (150 - 400) |
| Serum Creatinine | 400 μmol/L | | (70-150) |
| SGPT | 355 IU/L | | (3-35) |
| SGOT | 296 IU/L | | (3-35) |
| Alkaline phosphatase | 105 IU/L | | (30-35) |
| Serum bilirubin | normal | | |

- 2.1. Mention the underlying clinical condition. (20 marks)
- 2.2. Mention (02) causes for the above clinical picture. (40 marks)
- 2.3. Mention four (04) investigations relevant to this condition. (40 marks)
- 3. A 3 year old boy presented on 6th day of fever with desquamation of trunk and limbs. It was preceded by an erythematous maculo papular rash which has developed few hours after the onset of fever. He was fully vaccinated. Drug allergy was ruled out from the history. He was treated in the paediatric ward with IV fluids and antibiotics.
 - 3.1. What four (04) possible diagnoses would you consider? (20 marks)
 - 3.2. Give two (02) additional features which could have occurred in the early stage of the disease to support each diagnosis. (40 marks)
 - 3.3. Outline the management of one of the conditions. (40 marks)